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ABSTRACT

Through consideration of a conceptual framework, this paper proposes that a comprehensive evaluation can be made that accounts for a project's ability to accomplish social change. The concepts are: (1) ideological development--permits the evaluator to predict the probability of the ultimate change a project can accomplish based on the change agents' consideration of social justice; (2) legacy of change--permits evaluators to determine the potential for continued change after a project's funding ends; (3) comparability--contrasts one project with another to determine the relative merit of each; and (4) social efficacy--includes the determination of the effect of a project and the use of resources used by the project. This framework provides a better standard of judgment than can be made from a single evaluation methodology, because the concepts are not discrete: consideration of each provides a triangulation of data and perspectives to evaluate outcomes of social intervention. A major benefit of this framework is that it offers a procedure for considering effects of social change projects that incorporates multiple perspectives in the analysis. Also considered, however, are which social elements must be changed to effect social change ultimately. (Author/GK)

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A CONCEPTUAL FRAMEWORK FOR THE EVALUATION
OF PLANNED SOCIAL CHANGE

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A Conceptual Framework for the Evaluation of Planned Social Change

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ABSTRACT

Although methodologies have been developed in education to evaluate interventions that attempt to overcome injustices in education, no single methodology comprehensively considers the multitude of variables nor the ultimate social effect of an intervention. Therefore, to evaluate an educational change project, a conceptual framework is developed to consider the ultimate effects of an intervention and the extent of these effects over time.

The premise of this paper is that through consideration of the concepts of the framework (ideological development, change legacy, comparability, social efficacy), an evaluation can be made that accounts for a project's ultimate ability to overcome social injustices.

EVALUATING SOCIAL CHANGE

When the justice of certain customs or institutions is not universally accepted by all members of society, dissatisfied individuals may develop strategies to overcome what they consider to be social injustices. To determine the overall effectiveness and worth to society of these strategies the outcomes of such attempts at social change should be evaluated. Because planned social change projects are complex social interventions and not controlled experimental treatments, the ability to determine a project's effect versus the effect of other social factors is extremely difficult. To overcome this inherent difficulty in determining causality, a number of evaluation methodologies have been developed in the social sciences which focus on varying aspects of a change project's probable effects.

A Multiple Perspectives Approach

Although numerous evaluation methodologies exist, particularly in the field of educational change, no single evaluation methodology considers the multitude of causal variables nor the variety of target groups involved in interventions to overcome injustices in educational systems. In the evaluation of an educational change project, upon which this paper is based, a conceptual framework was developed that considered the project's effects and the extent of these effects over time.

Since there is no single perspective on how best to induce change, there can also be no one way to evaluate change. What the conceptual framework presented here offers, therefore, is a variety of perspectives to consider the ultimate effect of an intervention that attempts to overcome social injustices.

Although most contemporary educational evaluation methodologies may consider the social change project to be successful if it has met its objectives,

the social effect of the project may still be unknown. The major premise of this paper is that through consideration of each of the concepts of the framework a comprehensive evaluation can be made that does account for a project's ability to accomplish social change. While the concepts are not discrete, each one considers a slightly different aspect of change that is needed to evaluate the ability of a social intervention to alter individual or group behavior. The four concepts are: 1) ideological development, which allows the evaluator to predict the probability of the ultimate change a project can accomplish based on the change agents' consideration of social justice; 2) legacy of change, which allows evaluators to determine the potential for continued change after a project's funding has ended; 3) comparability, which contrasts one project or activity with another to determine the relative merit of each; and 4) social efficacy, which includes the determination of the effect of a project and the use of resources employed by the project. From this conceptual framework evaluators can have a better standard of judgment to determine if a change project has assisted the process of social change than can be made from any single evaluation methodology.

Toward a More Comprehensive Methodology

The theoretical development in this paper is based upon the author's work as one of two evaluators of a federally-funded project on sex equity in public school administration. The data were collected over a two and one-half year period (between 1977 and 1979) and included the collection of data from within the project, data on the project's impact on the target groups, and the tabulation of data from state departments of education in several western states. The project was housed at a university in Oregon.

Because the evaluation literature does not provide an effective

and comprehensive model for evaluating the ability of a change project to accomplish social improvement (see Kempner, 1979), the development of a methodology was necessary to evaluate the educational change project under consideration here. Since planned change projects are only one of many variables that can effect change in a complex social system, an effective evaluation must be complete enough to capture the full reality of the change effort and attempt to determine the causal effect of a project.

Because many evaluation methodologies do not consider the ultimate goals of a project nor the effect of a project over time, evaluation methods which provide a more complete description of reality are needed. While present evaluation methodologies may consider a project to have been successful by meeting its objectives, the social effect of the project may still be unknown. The purpose of this paper is to present the framework for the evaluation of planned social change projects that was developed so that a larger amount of knowledge about the ultimate social effect of a project can be gained. To accomplish this task a conceptual framework, which is defined by Denzin (1970, p. 67) as a "broad structure of both explicity and assumed propositions" composed of descriptive categories, was developed.

Conceptual frameworks are useful because they can assist researchers and evaluators provide a more comprehensive analysis of social interventions than is typically allowed under more traditional forms of evaluation. Campbell (1969, p. 409) comments on this issue by stating, "If the political and administrative system has committed itself in advance to the correctness and efficacy of its reforms, it cannot tolerate learning of failure." The nature of program funding often prevents researchers and evaluators from questioning the ultimate project goals and questions, such as why the target group remains the target group, are rarely considered. Weiss (1975, p. 24) explains:

We concentrate attention on changing the attitude and behavior of target groups without concomitant attention to the institutional structure and social arrangements that tend to keep them "target groups."

Through the development of conceptual frameworks, which attempt to identify the determinants of social change, evaluators will be able better to consider the full range of effects that are necessary for social improvement.

THE CONCEPTUAL FRAMEWORK

The following framework is provided, not as a theory from which uniformities can be derived (see Merton, 1968), but as an initial work from which further deductions may be made to arrive at a theory for the evaluation of social change. It is apparent from a critique of contemporary evaluation methodologies (Kempner, 1979) that a comprehensive theory of the evaluation of social change has yet to be developed. Although this paper does not attempt to develop such a theory, it does consider those social concepts that should be evaluated to determine if a planned change project is effecting social change.

Ideological Development: The Concept

Ideology can be explained as an "interlocking set of beliefs (Bowers, 1977, p. 35) used to justify a group's opinion or doctrines on socio-political issues, such as cultural maintenance or change. Because individuals' ideology provides the "guiding thread for their problems, their concept and their focus of thought" (Mannheim, 1936, p. 4), it is essential for evaluators to consider this first concept in the framework, the role of ideology in the development of strategies produced by change agents. The identification of a project's ideology can help explain why project members made certain decisions to pursue change in specific ways. The consideration of ideology is, therefore, the first

of the four concepts in the framework for the evaluation of planned social change.

Morality and Social Justice. In planned change interventions the consideration of ideology by evaluators is important in determining what values guided the processes that were responsible for the outcomes that occurred. By emphasizing the investigation of cognitive processes, as Piaget does (1951), evaluators can attempt to understand the beliefs and ideology that influence the ultimate goals of a social intervention. Whereas Piaget has established a system for the description of intellectual development, Kohlberg has developed a theory of moral development which is quite useful in the evaluation of social change. In Kohlberg's theory (1975, p. 675): "morality is a natural product of a universal human tendency toward empathy or role taking, toward putting oneself in the shoes of other conscious beings. It is also a product of a universal human concern for justice."

Kohlberg's theory provides an understanding of how moral reasoning changes through a developmental process. In this theory, individuals are seen by Kohlberg to fall into one of six stages of moral development, which extend from simple reciprocity at the first stage to a "conscience or principle orientation" at the sixth stage (Kohlberg, 1967, p. 171). Because higher moral reasoning is dependent upon the concern for justice, the dynamics of moral development can be applied to the development of a belief system or ideology of social justice. Therefore, in the conceptual framework presented here, moral development is considered comparable to ideological development. By using Kohlberg's basic concepts, evaluators can categorize a change project on its overall level of ideological development based on the project members' consideration of social justice.

Because a limited amount of goods and services are available in society, the issue of social justice arises when the fairness of resource allocation is considered (see Hume, 1971, p. 71). Evaluators must, therefore, determine if change agents are actually seeking social improvement by changing the social aristocracies of resource distribution, or if the agents are oblivious to issues of social justice and are seeking only to better their own position. Because any behavior can be justified on the basis of beliefs or ideology, no universally accepted concept of justice has yet been devised. Even though a universal concept does not exist, effective evaluators must still judge a social change project's members upon their definition of social justice to determine if social improvement can be made under such a definition. Although justice is typically defined by the beliefs of the dominant culture of a society, Rawls (1971) does offer two basic principles which provide possible criteria for the evaluation of a change project's concept of social justice.

According to Rawls's theory, when individuals who are unaware or "veiled" to their own position in society and knowledge of their fortunes, abilities, and intelligence assemble in an hypothetical "original position" to develop universal principles of justice, they would choose the principles of Rawls's theory (1971, p. 12). This original position is defined by Rawls as the "appropriate initial status quo, and the fundamental agreements reached in it are fair" (p. 13). Rawls believes that the first principle to be chosen in this hypothetical original position would state, basically, that every individual has an equal right to all basic liberties within the system of liberty for all. The second principle would explain that social and economic inequities are allowable only if such inequities benefit the "least advantaged" members of society (pp. 302-202).

Although these principles can provide helpful criteria for the evaluation of planned change, these principles are still based upon certain cultural

assumptions made by Rawls (see Wolff, 1977). Even though Rawls's theory is limited in its applicability and universality, the principles of justice can serve as guidelines in the determination of the extent of change a social project can or has induced. Members of a change project need not subscribe to Rawls's principles of justice to be effective, but the manner in which the concepts of the "least advantaged" and "liberty" are considered can indicate how aware individuals are of their own biases.

Stages of Development. Because morality is seen as the product of an individual's concept of justice in Kohlberg's theory, Pougiales and Kempner (1979) identify three stages of ideological development for planned social change projects. The levels are not intended to be discrete categories but provide a hierarchical range of ideology to distinguish between three general developmental stages. The assumption of ideological development is patterned after Kohlberg's theory of moral development. Although Kohlberg's work has been with individuals, research has been initiated on the moral atmosphere of groups (Power, 1978) to characterize a group's level of moral development. On the basis of these investigations and their own work, Pougiales and Kempner have proposed the following levels of ideological development in planned change projects, which were used to evaluate the project under consideration.

The first level of ideological development is analogous to Kohlberg's (1973, p. 164) "preconventional level," which includes the first two stages of development in his theory. At this level, change is justified on an efficient, reciprocal basis, not a value one. Although a project goal may be desirable at this level, the rationale for its implementation is efficiency or self-interest. There is no real accomplishment of social change at this level, but rather a replacement of one social system for another--neither having much concern for social justice.

At the second level of development, change agents are characterized by an acceptance and reliance on the status quo. This level is patterned after Kohlberg's (1973, p. 164) "conventional level." Even though individuals at this level of ideological development are socially critical, the impetus for change comes from the dominant culture. The change effort is, therefore, compatible with present cultural norms and seeks to make adjustments within the social system through methods that can be condoned by the status quo. Justice at this level of development is defined by the beliefs and values of the dominant culture.

Change agents at the third level of ideological development are characterized by their cultural awareness beyond the simple acceptance of the inherent values of a society. Change is justified by principles of social justice which would overcome social aristocracies that perpetuate inequities. Change agents at this ideological level are morally similar to Kohlberg's (1973, p. 165) "postconventional, autonomous, or principled level." Rather than seek only adjustments in the inequities of the status quo, change agents at this level of development attempt to alter practices that perpetuate aristocracies. By seeking out alternative methods from among the variety of theories of change, individuals at the third level of development will utilize whatever methods will be most effective in accomplishing social improvement.

Because effective evaluation designs must assess the ultimate goals, the justification for the goals, and the manner in which the goals were met, consideration of the ideological development of a change project and its members can provide an analysis of the processes that were responsible for a project's effect. By generating information instead of verifying conclusions, evaluators can provide data to explain why an outcome occurred. Just as Piaget focuses upon cognitive processes to explain the reason for an outcome, the emphasis on the consideration of ideological development is upon the processes of a change group to

determine why certain outcomes occurred. Through observation of how members of a change project develop and implement strategies, evaluators can determine the level of ideological development and critical awareness of the group as a whole.

Ideological Development: Evaluation of the Concept

Because evaluators cannot look at every aspect of a project, a sample of activities must be taken to "limit the elements studied" (Stake, 1967, p. 532). In a manner, similar to the sampling of transactions in the field of accounting (Mautz and Sharaf, 1961), events have been evaluated from the project under consideration that attempt a representative picture of the project.

By selecting elements or strategies that represent each of the four concepts in the framework, a comprehensive judgment can be made of a project's ability to accomplish social improvement. Through the integration of both quantitative and qualitative methods, the conceptual framework can incorporate various perceptions of events in the evaluation. To explain how each of the concepts can be used in the overall evaluation of a social change project, examples are presented after the explanation of each concept to show how the concepts were used and integrated in the evaluation of the project under consideration here.

Rather than rely only upon questionnaires, surveys, or interviews of intended behavior, evaluators can assess more realistically a project's level of development by observing the project member's behavior during the intervention. By focusing also on the processes which affect behaviors and outcomes, evaluators can explain how and why an event occurred, instead of describing only what occurred. The data for this analysis were drawn from sources such as field notes, tapes of meetings, project documents and interviews. Specifically, the assessment of the project's ideology was made by the evaluators on the basis of the interactions

observed among the staff members and the target groups and on the basis of the patterns that developed in the use of certain strategies by the project.

The project was organized around the pursuit of six goals: 1) building awareness of sex inequity in education; 2) restructuring the content of training programs in education; 3) training and recruiting women for educational leadership; 4) building capacity in the state for the continuation of equity activities; 5) conducting research on sex inequities; and 6) disseminating the project's outcomes. The basic focus of these goals was upon the development of methods to help women enter existing administrative positions. Only one activity was devoted to altering the present structure of administrative positions. By emphasizing integration and movement into jobs, instead of stressing ways to change the nature of these jobs, the project members accepted the basic structure of the administrative position. Because the project's intervention strategies were aimed basically at getting more women into existing administrative positions, strategies to alter the nature of the position were not emphasized. Strategies to move more women into administrative positions are much different than strategies aimed at changing the nature of the position that perpetuates male domination. The other project goals included strategies aimed predominantly at facilitating the movement of women into the existing administrative hierarchy.

The outcomes of these studies, although interesting, are less important to the ultimate evaluation of the project than how the choice of these strategies indicated the project's preferred method of intervention. Although these studies provided worthwhile data, the project's research efforts were limited primarily to awareness-building. Additionally, the decisions or preferences for which target groups were to be emphasized provided an indication of the project's acceptance of the structural status quo.

Although the instrumental goals of the restructuring activities were met,

the eventual outcomes of the project's efforts focused upon individuals already in power (professors and administrators) and upon dissemination of information, not restructuring administrative jobs. Even though project members did not accept the status quo of fewer women in educational administration, the strategies selected displayed a choice not to change the economic and hierarchical nature of administrative positions in the educational system. While the restructuring activities did accomplish changes in the requirements for ascension to administrative positions, they did less to affect the nature of the position, or the behavior of the people already in these positions.

Several actions by project members indicated their consideration of social justice, which provide an evaluation of ideological development. For example, the project did not generally consider what should be the ultimate goals of an intervention designed to erase sex inequities in administration. During a staff meeting on the project's self-evaluation, one project member objected to a suggested emphasis on social justice in the evaluation. This individual explained that the project was not funded to achieve that goal. A brief discussion ensued over the project's ultimate objectives and although consensus was not reached, a number of project members agreed that the project's overall goal was to increase the number of women in educational administration and not consider issues of social justice.

The limitation of the project's ultimate objectives to equity in administration is analogous to the distributive justice of resources. Methods for the distribution of resources can be devised, but these methods do not assure justice nor assure the worth to society of the production of these goods. Similarly, methods have been devised to certify and employ school administrators and the project intervened to provide equal access for women to the certification and employment process. To assume, however, that present administrative

positions are inherently worthwhile to society, regardless of the person who holds the position, is a limited viewpoint. Furthermore, the assumption that simply having more women in these positions will create greater social justice is also a narrow belief, especially if the nature of the position remains unchanged.

A further limitation of the project in its ultimate goals was the limited consideration of the least-advantaged members of the educational system--the children. Because the ultimate purpose of schools is the education of children, presumably the function of administrators and teachers is to help create the best possible environment in which children can learn. By choosing not to deal with the present educational structure and the role of administrators and teachers, the project did not consider how the social purpose of education could be met better. Although the attainment of sex equity is a worthy goal, this goal has meaning only if it benefits the least-advantaged members of the educational system in Rawls's theory of justice. By seeking only to move women into the present structure of administration, the project focused its efforts on giving women access to a position of uncertain worth and social justice.

Overall, the project was guided predominantly by what Coleman (1971, p. 643) terms a "psychologist's theory." This theory presumes that by changing the individual, social change can be effected. Techniques employed in this individual-change process tend to be those which attempt changes in behavior by informing individuals of the social problems that exist. Through this method, change agents attempt to induce people to change their behavior. The primary focus of the project's strategies was upon the stimulation of individual awareness and an information on the dissemination of information as a change technique instead of more confrontative strategies. For example, one proposed activity was to present course materials on sex equity in some of the training

sessions of the administrative extern program conducted by a department of the university. During the project's first year the staff members attempted to participate in the extern program but were told the schedule was full. Rather than directly confront the administrators of the program, the staff members of the project pursued the issue no further and the project was never included in the extern program's training sessions during the three years of the project.

Decisions not to pursue certain types of activities indicated the staff members' techniques of change; an integrative, internal approach that avoided confrontation. Because of this desire to avoid conflict and possibly alienate certain groups, the project chose strategies to increase these groups' awareness, rather than directly confront their behavior. Rossi and Williams (1972, p. 21) are skeptical over the potential success of change programs, like this, "that are directed at transforming individuals who are relatively autonomous." They explain that "when individuals are the target of programs, it can be anticipated that success will be harder to achieve." Although it is easier, initially, to direct change efforts at individuals, unless there are also methods to induce changes in behavior, little ultimate change can be accomplished.

Because of the techniques of change employed by the project and on the basis of the project members' general acceptance of the present structure of the administrative position, the ideology of the project can be classified at the second level of development. As discussed previously, individuals and groups at the second level of development are characterized by their reliance on the values of the dominant culture and their change efforts are typified by an acceptance of the predominant cultural norms and institutions. At this level of development change is considered only within the strictures of the present institutional

structures. Because the current social ideology is implicitly acknowledged, the change accomplished is only what the system will allow.

The project's activities were predominantly information-oriented, while favoring collaboration and avoiding confrontation with institutional leaders. Although these activities were not accomplished without some effect, interventions that occur at this second level of development are limited in their potential for accomplishing significant social improvement. Change strategies that are guided by a level-two ideology are much less extensive in their social effect than those strategies that are guided by a level-three ideology, which address methods of change beyond the inherent values of the society.

The ideological classification of a change project, at a specific level, while providing one indication of a project's effect, indicates the underlying assumption of change that motivated the project's members during this project. Additional information is still needed by evaluators, however, to understand the social effect of a change program. Although the concept of ideological development can indicate the social improvement made by a project, evaluators must determine the potential for continued change of a project.

Legacy of Change: The Concept

Because planned social change projects are usually ephemeral in nature, the project's ultimate effects may not be apparent for several years after the funding has ended. Additionally, to create extensive social change, the ramifications of interventions should be apparent in the future through a continued legacy of the change effort. An example of this legacy is a strategy of the project under consideration that recruited women to doctoral programs in educational administration. Because the women who entered the program need several years

to complete their degrees and several more years to gain the necessary experience to become administrators, the effects of the project's recruitment strategy may not be apparent for six or seven years. Therefore, evaluation of the project only on the basis of its immediate outcomes would provide an incomplete portrayal of the ultimate change a project may induce. Because social change projects should leave a legacy after the intervention has ended, it is essential for evaluators to consider this second concept in the framework to estimate the future potential of continued social improvement a change effort will create.

The need for a time perspective in evaluations is necessary because as Denzin (1970, p. 105) explains: "Instruments that elicit only predispositions to act, and fail to follow the unfolding trajectory of action through time, run the risk of leaving analysis at a superficial level." To prevent such superficial analysis, evaluators must identify the processes that may assist or hinder a project from continuing its effect over time. Whereas the analysis of a project's ideology provides an indication of the potential effect of ultimate change, continued social improvement is possible only if strategies which create a legacy of change are employed.

Through the analysis of the procedures and the products change agents use or create to assure the continuation of their intervention efforts, evaluators can offer better estimations of the capability of a project to facilitate change in the future. Although social change projects may be successful in meeting short-term purposes the overall evaluation of a project's success cannot be made until the ultimate goals are considered over the long-term effect of the project. The determination of the legacy a project will leave after it has ended can provide evaluators with an indication of the future potential for change a project can induce. Legacy

of change, in conjunction with the consideration of ideological development provides evaluators with an excellent understanding of a project's ultimate ability to accomplish social improvement.

Legacy of Change: Evaluation of the Concept

Since the evaluation of a project's present outcomes cannot account for the future effects of a project, the potential of a project to leave a legacy of change must be considered. The project under consideration here developed a number of activities that will continue the process of change beyond the funding of the intervention. One of the major accomplishments of the project was the establishment of an organization which will continue the change effort initiated. An example of the project's legacy was the development of a state-wide organization of women administrators in education. Under the original sponsorship of the project, this group was organized to continue some of the major activities of the project. Specifically, the organization continued the publication of a newsletter, the coordination of a directory for administrative candidates, and the organizational planning the project had provided (e.g., conferences, information clearinghouse). Of the many project activities, the creation of this state-wide organization did create the most significant legacy to continue the change effort beyond the life of the project.

In the evaluation of a legacy, such as the organization created by the project, even though the change effort will continue, the ultimate effect of this activity must be considered. Although the organization is a major legacy of change created by the project, the extent of social change that can be accomplished by the newly developed organization may be limited by its level of ideological development. The success in creating the organization was a considerable achievement of the project, but the change approach of the organization may limit its potential for altering the sexist nature of the admin-

istrative structure.

Because the organization is a product of the project, its initial method of change operates within the values of the status quo. Even though the project operated at the second level of ideological development, the legacy of change it has left, the state-wide organization, has the potential for inducing more change than had the project left no legacy at all. The project can be regarded as the first step in the development of an overall change strategy that has led to the organization of women administrators. For the organization to induce social change, however, it must utilize strategies that will dramatically alter the institutions that perpetuate the sex inequities in educational administration.

In addition to the processes that leave a legacy of change, products may also be created that endure beyond the life of a project. For the project under consideration the creation of products concerning issues of sex equity in education was a high priority. Numerous research articles, a research textbook, a slide-tape show, and several versions of a final report were produced by the project. These products will provide a continuing legacy to continue the intervention initiated by the project. Although the potential for these legacies to induce social change may be limited by the level of ideological development under which they were developed, the project's legacies can continue to facilitate some change.

Comparability: The Concept

The concept of comparability, the third in the framework, is similar to "social evaluation theory," because as Pettigrew (1967, p. 243) explains, "human beings learn about themselves by comparing themselves to others." Essentially, to understand value, an object or event must be considered in relation to something else; objects in isolation have no inherent worth with-

out referent value. As Winch and Campbell (1969, p. 143) observe: "Since it is central to the scientific endeavor to seek for relationships among variables, the paradigm of the scientific problem is that in which observations are classified with respect to one another."

To determine the effect of a social intervention, evaluators must consider the impact of one strategy in relation to the impact of another strategy. Unless evaluators can offer advice to decision-makers based on a comparative analysis of strategies they have little basis for determining which strategy was the most beneficial for the decision-makers and target groups. As Scriven (1974, p. 64) claims, "All useful evaluation is comparative...."

While an experimental approach to evaluation has many benefits (Campbell and Stanley, 1963) such intentional experiments are not always practical or ethical during social change interventions. Additionally, directly comparable events or strategies may not always be available. Even though direct comparisons may not be feasible, by investigating the effects of related strategies or interventions evaluators can gain a better understanding of the real effect of a specific intervention. For example, although the various project strategies of the project under consideration could be contrasted with one another to offer a comparative analysis, there was no project identically comparable to the overall intervention.

Comparability: Evaluation of the Concept

As an example of how this concept was evaluated, a quantitative analysis is presented that was used to discover if the number of women administrators in the state in which the project operated (Oregon) was significantly different than several other states during the same years. This analysis was conducted to indicate the overall effect of the project in Oregon compared to effects that might be occurring in other similar states. Although this

analysis cannot prove the effect of the project's intervention, it can determine if the changes in Oregon over several years are significantly different than the changes in other states.

To test various models to determine the effect of year and of state, the "log-linear" analysis of contingency tables is used (Goodman, 1970, 1972). By gathering data from other states comparable to Oregon, a contingency table by state, year, administrative position, and sex was tabulated (presented in the Appendix). Three western states (Colorado, California, Washington) were chosen as comparisons to Oregon. Although Colorado is most similar to Oregon in population, California and Washington are comparable in the regional interests these states share with Oregon. Because data on the basis of sex were available for a five year period, the analysis covers the 1973-74 through 1977-78 school years. Administrative positions were divided into three categories: superintendents and assistants, principals and assistants, and a general category for directors, supervisors and coordinators.

The log-linear analysis is useful because it predicts the "natural logarithm of the odds of falling into one category of the dependent variable" (Evers, 1976, p. 6). The CONTAB computer program (Nolan, 1974) was used to test the models summarized in Table 1.

The first model tested predicts that each variable is independent in its effect. This model does not fit the observed data because the probability of being wrong in rejecting this hypothesis is zero ($P= 0.0000$). The second model, which predicts two-way interactions, also does not fit. The third model, three-way interactions, does fit the data. Because the data fit this third model reasonably well, other less complex interactions were tested to discover if a more simple three-way interaction could fit the data. As the summary shows, no other model could fit the data as well as the third model.

TABLE 1.--Summary of selected models*

| Model | χ^2 | Df | P |
|--|----------|-----|---------|
| 1. Year, Position, State, Sex | 6820.691 | 103 | 0.0000 |
| 2. Year-Position, Year-Sex, Year-State, Position-Sex, Position-State, Sex- State | 503.999 | 69 | 0.0000 |
| 3. Year-Position-Sex, Year-Position-State, Year-Sex-State, Position-Sex-State | 27.205 | 23 | 0.2473 |
| 4. Year-Position-State, Year-Sex-State, Position-Sex-State | 51.095 | 31 | 0.0130 |
| 5. Year-Position-Sex, Year-Sex-State, Position-Sex-State | 62.678 | 44 | 0.0334 |
| 6. Year-Position-Sex, Year-Position- State, Position-Sex-State | 70.710 | 33 | 0.0001 |
| 7. Year-Position-Sex, Year-Position- State, Year-Sex-State | 386.342 | 29 | 0.0000 |
| 8. Year-Position-Sex, Year-Position- State, Sex-State | 437.400 | 39 | 0.0000 |
| 9. Year-Position-Sex, Position-Sex- State, Year-State | 113.532 | 55 | 0.0000 |
| 10. Year-Position-Sex, Year-Sex-State Position-Sex | 415.967 | 50 | 0.0000 |
| 11. Position-Sex-State, Year-Sex-State, Year-Position | 86.168 | 52 | 0.0021 |
| 12. Year-Position-Sex, Year-State, Position-State, Sex-State | 471.044 | 61 | 0.0000 |
| 13. Year-Sex-State, Year-Position, Position- | 444.624 | 58 | 0.0000 |
| 14. Position-Sex-State, Year-Position, Year-Sex, Year-State | 145.671 | 63 | 0.0000 |
| 15. Year-Position-Sex-State | 0.000 | 0 | -1.0000 |

*The models are fitted to the contingency table in Appendix.

(the last model is expected to fit exactly, since it predicts all possible interactions). Because the models of independent and two-way interaction did not fit the data, the analysis suggests that sex, year, state, or administrative position, alone, or in any pair are not sufficient to explain the effects in the whole model.

The next step of the analysis is to investigate further the effects of the third model, which fits the data. Table 2 presents the natural logs of the cell effects and the standardized value of the effect (only the cells for women administrators that are relevant to the analysis are presented). The most important effect parameters in the analysis are those for the three-way interaction of year-sex-state. In the first year of analysis, the number of women administrators in California (cell effect = .131789) has the largest effect, followed by Colorado (.112469), Oregon (.095798), and Washington (-.340057). In the second year, Oregon has the largest effect, although it is not significant because the standardized effect equals only 1.500, which is less than 1.96, the typical (.05) level of significance. This standardized effect is the ratio of the effect divided by the standard deviation (Nolan, 1974, p. 80) and is, therefore, similar to the use of z-scores.

Additionally, in this analysis the effect parameters also show no significant effects by state over the remaining years in the analysis. Since the effects in Oregon are of more concern, however, it is important to note that the effect of women administrators in the fifth year was in a large negative direction, which approaches significance (-1.687268). In this year the number of women administrators in Oregon had a negative effect in the model; that is the relative frequency of women administrators in Oregon during the 1977-78 school year declined compared to the other states during that year.

TABLE 2.--Selected effect parameters of best-fitting model: Year-sex-state*

| | | Oregon | Colorado | <u>1973-1974</u> | |
|------------------|-------------|-----------|-----------|------------------|------------|
| | | | | California | Washington |
| Women | Effect | 0.095798 | 0.112469 | 0.131789 | -0.340057 |
| | Standardize | 1.110114 | 1.093859 | 2.000078 | -2.135516 |
| <u>1974-1975</u> | | | | | |
| Women | Effect | 0.115620 | 0.064084 | 0.037765 | -0.217469 |
| | Standardize | 1.500487 | 0.687689 | 0.624399 | -1.474222 |
| <u>1975-1976</u> | | | | | |
| Women | Effect | 0.076900 | 0.081480 | 0.019495 | -0.177876 |
| | Standardize | 1.009219 | 0.909152 | 0.327334 | -1.217402 |
| <u>1976-1977</u> | | | | | |
| Women | Effect | 0.014703 | 0.039432 | 0.050887 | -0.105022 |
| | Standardize | 0.193930 | 0.443988 | 0.869027 | -0.730100 |
| <u>1977-1978</u> | | | | | |
| Women | Effect | -0.303023 | -0.297467 | 0.239935 | 0.840424 |
| | Standardize | -1.687268 | -1.593665 | 1.393052 | 1.662150 |

*The best-fitting model is all possible three-way interactions, model number three in Table 1.

• NOTE: Parameters for Men are inverse of those for women. Since this is the case in dichotomous categories, the parameters for men are not included in the table.

While this analysis does not mean that the project's activities had a negative effect, it does suggest that the efforts of the project were not significant enough to overcome whatever social phenomena were occurring in the state to reduce the relative frequency of women administrators.

In summary, the log-linear analysis shows that all possible three-way interactions among sex, state, year, and administrative position are needed to explain the effects in the entire model. Specifically, the data suggest that the changes in the number of women administrators in Oregon compared to the women administrators in the other three states is not significant. Additionally, the data appear to show no significant effects in Oregon during the years the project operated, 1976-1978.(Data were not available from the other states for the final year of the project, 1978-79.) Although the intervention and some of its activities may have been necessary to facilitate the small positive effects shown, they have apparently not had an appreciably significant effect when compared to the concomitant effects in the other states surveyed. The findings would indicate that social factors other than the project, such as Affirmative Action or Title IX, may have been responsible for the differences.

Social Efficacy: The Concept

The final concept of the framework is, basically, a "so what?" question, which considers the worth to society of a project's efforts. The social efficacy of a project refers to its effect, extent of effect and the use of resources by the project.

In the determination of a project's social efficacy, evaluators must ask if the intervention is worth doing, even if it is successful. The choice of a specific social intervention is always made at the expense of another method or use of resources. This "notion of costs as benefits forgone"

(Haller, 1974, p. 408) is the opportunity cost sacrificed in favor of choosing a certain strategy over an alternative one. To determine the social efficacy of an intervention, evaluators must consider, therefore, what was given up in favor of the chosen intervention. Additionally, evaluators must consider the use of resources by a project and the extent of effect caused by the intervention. In this manner the determination of social efficacy can provide an evaluation of the worth to society of an intervention and the effectiveness of the resources employed.

An important component in the evaluation of social efficacy is the efficient use of resources employed by change agents. The social cost involved must be compared to the benefits derived and evaluators must judge if the intervention was an efficient use of people, time, facilities, and money.

An intervention must also be assessed according to its sufficient use of resources; that is, did the project adequately use all resources available? To accomplish a social intervention effectively, change agents must identify human and material resources that can assist the change effort. Because interventions occur in a social environment, change agents will make contact with target groups who are both hostile and supportive to the change advocated. Regardless of the intervention methods used, change agents must work with individuals outside their group to facilitate the intervention process. Contacts must be made with the target group so change agents can understand the needs of these individuals. This role-taking ability allows change agents to plan intervention strategies more in accordance with the needs of target groups. Sufficient contact must be made by change agents to develop an empathic realationship with both hostile and supportive target groups. Change agents who isolate themselevs from the target groups have little basis for knowing what change is really needed.

In addition to the sufficient use of human resources, a project should also be evaluated upon its sufficient use of physical resources. To accomplish an intervention effectively, change agents must identify both human and material resources that are available to assist the change effort. Just as people exist who can help change agents conduct an intervention, physical or material resources may also be available to assist this effort. To accomplish an efficient intervention, change agents must investigate what resources already exist that are pertinent to the change effort and then use these resources to prevent unnecessary duplication. From the findings of previous intervention efforts, change agents can plan innovative strategies that sufficiently consider both the knowledge gained and the resources developed or used during similar interventions.

The final issue to be considered by evaluators in the determination of the social efficacy of a project is the intervention's effect and the extent of this effect. Even though an intervention may constitute an efficient use of resources and have a good potential for future change, the intervention may cause little social improvement. To understand the social efficacy of an intervention, evaluators must determine if the intervention produced the intended effect.

In addition to a project's effect, the extent of this effect, like its legacy of change, is an important consideration for evaluators. A project may develop processes and products to leave a legacy of change, but evaluators must still determine if this legacy has the ability to produce an effect extensive enough to achieve social change.

Social Efficacy: Evaluation of the Concept

The first example of how the project under consideration was evaluated with this concept concerns the project's sufficient use of resources. Although the project did coordinate its activities with several of the major insti-

tutional groups in the state, contact with teacher's organizations or with individuals in the administrative certification program who were not pursuing doctorates was not emphasized. Since women in education are found in the greatest numbers at the teaching level, these women compose a large group of potential administrators who have relevant experience. By emphasizing the recruitment of women to doctoral programs, the project did not sufficiently address all the women who could move into administration.

Even though fewer physical resources than human resources on sex equity were available to assist the project, the staff members did more completely use existing resources. The project became a focal point for information and acted as a clearinghouse for resources on sex equity in the state and region. This important function was to be assumed by the organization of administrative women organized by the project.

To be socially productive change agents must be efficient in their use of resources. Therefore, the second example of how the project was evaluated with the concept of social efficacy concerns the project's efficient use of resources. The major activity of the project was the establishment of a network to monitor hirings within the state and to provide information on the availability of administrative jobs. Six coordinators were hired and a large data collection was initiated. Because of the expense of this network it appears, however, that a more efficient strategy could have been used to yield similar results. As an example, instead of the expense of six coordinators traveling throughout the state, it is possible similar data could have been gathered over the telephone. Because the coordinators' data was information-oriented and not used as evidence to confront districts that did not follow equitable hiring practices, less complete data, collected at a lower cost, could have been a more efficient use of the project's resources.

Certainly the coordinators were able to compile comprehensive data by visiting school districts, but the high cost of data collection did not appear to justify the outcome. Although the data collection of the network was not an extremely efficient use of resources, the development of the organization of women administrators was a much less expensive activity to implement and yielded more extensive results.

Finally, to evaluate a change effort completely, change agents must determine if an intervention's effect is extensive enough to accomplish social change. Even though a project may successfully meet its goals, change agents have no assurances that the intervention will actually cause social change. In the project a number of activities were directed at changing the attitudes of both women and men on the inequities of educational administration. Of particular interest to the project was changing the attitudes of women toward themselves. This emphasis for the project was apparent in the recruitment of women to the doctoral program and in some of the workshop sessions conducted in the project-sponsored conferences.

The need to encourage women to pursue administrative careers is, of course, paramount if women are ever to move into these positions. Strategies that only emphasize attitude change, however, may do little to actually change a woman's ability to become an administrator. A "properly" dressed woman with a positive attitude of herself cannot hope to overcome an educational structure that discriminates against women, whatever her attitudes. Unless the institutional norms are changed to accept women, the only women that may become administrators are those who are most like the men already in power.

The consideration of a project's effect and the extent of this effect provide an overview of an intervention's success. Even if a project has been sufficient and efficient in its use of resources, the effect of the project's activities may be minimal. For example, the use of attitude strategies, as discussed above, illustrates

the slight effect of certain activities, even when these activities have been successfully accomplished.

To determine the extent of the project's effect, the manner in which the intervention strategies changed the target group's beliefs and behaviors must be evaluated. The project's emphasis on certain target groups was parallel to the project's preference for particular strategies of change. Because one of the major goals of the project was to disseminate a model of change, the duplication of similar strategies was not the most efficient way to generate knowledge of the best methods for inducing change.

The extent of the project's effect was also limited by its adherence to a particular assumption of how change occurs. By not questioning their basic premises of how change can occur, the project's members failed to consider the potential effect of alternative assumptions of change. For example, when change agents operate primarily within the psychologist's theory of change, as this project did, only certain individual-oriented strategies are expected to effect change. By not using other methods of change based on different theories, change agents do not test the potential outcomes that could be made from different techniques. When a project, whose goal is to generate knowledge of how to induce change, operates from the confines of one perspective, only limited change can be anticipated. When new solutions are not sought, the old institutional norms will not be significantly changed.

Because the project did not employ multiple perspectives in the selection of change techniques, it did not fully investigate the efficacy of alternative methods of change. The project was ultimately limited in the extent of change it could produce because the majority of project members accepted the present structure of the administrative position; change is tolerated only when it is in accordance

with the values of the institution's members.

While any single social intervention, such as this project, cannot typically accomplish improvement alone, a project's effect should be measured on its ability to add, incrementally, to the force of social change. Although the project helped organize women administrators in the state, the project was less effective in other areas of change. Organizational and awareness building strategies can be essential first steps in accomplishing social improvement, but further methods must be employed to induce non-supportive target groups to alter their behavior.

OVERVIEW OF THE CONCEPTUAL FRAMEWORK

By considering each of the four concepts of the framework evaluators can determine the ability of social change projects to accomplish change. Because the four concepts are not discrete, consideration of each provides a triangulation (Denzin, 1970) of data and perspectives to evaluate the outcomes of a social intervention. Since multiple perspectives exist in any social inquiry, from analysis of these four concepts patterns of a project's effect can be discerned from different data and different perspectives.

Consideration of each of the four concepts provides a more comprehensive evaluation than can be accomplished when only one method of evaluation is employed. A major benefit of this framework then is that it offers a procedure to consider the effects of social change projects that incorporates multiple perspectives in the analysis. The framework also considers which social elements must be changed to effect social change ultimately. Since almost all change efforts are accomplished to overcome social inequities, evaluations should consider the ability of a change effort to alter the values, beliefs, and behaviors that perpetuate these inequities.

Because this framework is not a theory "from which empirical uniformities can be derived" (Merton, 1968, p. 143), it is proposed as a comprehensive scheme

that includes the major concepts that should be considered in the evaluation of change. Although further research is necessary to determine if the conceptual framework is inclusive and if it is effective in the evaluation of other social change projects, three of the most basic questions that must be considered will be addressed.

One important question, which has arisen from the use of the framework, is the fairness in evaluating a project beyond its stated intents or abilities. A danger of this approach is the potential of the evaluator for establishing an unrealistic or idealistic goal for a project. Such an artificial criterion for judgment can be avoided, however, by consideration of a project's level of ideological development in conjunction with the other three concepts in the framework. For example, should the members of a project adhere dogmatically to one method of change, whatever the project's goals, the amount of change will be limited by the assumptions of this method, since no one theory of change can predict uniform outcomes.

Even though each change project confronts different social circumstances the evaluation should determine how efficiently and sufficiently a project employed its resources and considered the possible methods of change. To provide a fair evaluation, projects should be judged not upon intended goals or upon goals imposed by the evaluator, but upon the ultimate social goals of the intervention.

A second question over the use of the framework is how the bias of the evaluator can be controlled. Because the evaluation of a project's level of ideology is the most subjective concept in the framework, the judgment of this concept must be triangulated with data from the other concepts in the framework if it is to have validity. Unless the evaluator's judgment can be supported by findings from the other concepts in the framework, the bias of the evaluator will be exposed.

A third and basic question over the use of the framework is its applicability to a variety of planned social change efforts. Because all change efforts should consider the social justice of their activities, the four concepts of the framework are appropriate equally for projects of different sizes and capabilities. Even though a small project cannot be expected to attempt a large variety of methods of change, a project should be evaluated on its contribution to the change accomplished in the larger social movement with which it is associated. The excuse that a project was not funded to consider broader social issues does not relieve a project from the responsibility for considering the ramifications of its effects and the worth to society of such an intervention.

The ultimate goal of social change, according to John Stuart Mill (1871, p. 94-95) is to accomplish "social improvement" by facilitating the transition of a "custom or institution. . .from being a supposed primary necessity of social existence. . .into the rank of an universally stigmatized injustice and tyranny." Because an evaluation should consider the potential of an intervention to accomplish social improvement and determine if change has actually been induced, a theory is needed which can lead to uniform predictions of how change can be evaluated. Such a theory could assist in the development of strategies to overcome the inequities that exist in society because to evaluate change social scientists must know how change occurs. The framework presented here is a step toward the development of such a theory.

REFERENCES

- Bowers, C.A. Emergent ideological characteristics of educational policy. Teachers College Record, 1977, 79(1), 33-54.
- Campbell, D.T. Reforms as experiments. American Psychologist, 1969, 24(4), 409-429.
- Campbell, D.T. & Stanley, J.C. Experimental and quasi-experimental designs for research. Chicago: Rand McNally, 1963.
- Coleman, J. Conflicting theories of social change. American Behavioral Scientist, 1971, 14(5), 638-650

- Davis, J.A. The log-linear analysis of survey replications. In K.C. Land & S. Spilerman (Eds.), Social indicator models. New York: Russel Sage, 1975.
- Denzin, N.K. The research act in sociology: a theoretical introduction to sociological methods. London: Butterworth and Company, 1970.
- Goodman, L.A. The multivariate analysis of qualitative data: interactions among multiple classifications. Journal of the American Statistical Association, 1970, 65(2), 226-256.
- Goodman, L.A. A modified multiple regression approach to the analysis of dichotomous variables. American Sociological Review, 1972, 37(1), 28-46.
- Haller, E.M. Cost analysis for educational program evaluation. In W.J. Popham (Ed.), Evaluation in education: current applications. Berkeley: McCutchan, 1974.
- Hume, D. Justice and equality. In H.Bedau (Ed.), Justice and equality. Englewood Cliffs, New Jersey: Prentice-Hall, 1971.
- Kempner, K. A conceptual framework for the evaluation of planned social change, Unpublished doctoral dissertation, University of Oregon, 1979.
- Kohlberg, L. Moral and religious education and the public schools. In T. Sizer (Ed.), Religion and public education. Boston: Houghton-Mifflin, 1967.
- Kohlberg, L. The claim to moral adequacy of a highest stage of moral judgment. Journal of Philosophy, 1973, 70(18), 630-646.
- Kohlberg, L. The cognitive-developmental approach to moral education. Phi Delta Kappan, 1975, 56(10), 671-677.
- Mannheim, K. Idology and utopia. New York: Harcourt, Brace, and World, 1936.
- Mautz, R.K. & Sharaf, H. The philosophy of auditing. Menasha, Wisconsin: George Banta Company, 1961.
- Merton, R.K. Social theory and social structure. New York:Free Press, 1968.
- Mill, J.S. Utilitarianism (4th ed.). London: Longmans, Green, Reader, & Dyer, 1871.
- Nolan, J. CONTAB, In C.T. Ireland (Ed.), Computer programs for contingency table analysis. Washington, D.C.: George Washington University, 1974.
- Pettigrew, T.F. Social evaluation theory: convergences and applications. In D. Levine (Ed.), Nebraska Symposium on Motivation (Vol. 15). Lincoln: University of Nebraska Press, 1967.
- Piaget, J. Plays, dreams, and imitation in childhood. New York: Norton, 1951.
- Pougiales, R. & Kempner K., Evaluation of ideology: a case study of social change. Paper presented at annual meeting of American Educational Research Association, San Fransico, California, April 1979.

- Power, C. The moral atmosphere of the school: a new perspective in developmental education. Paper presented at the 8th annual symposium of the Jean Piaget Society, Philadelphia, Pennsylvania, May 1978.
- Rawls, J. A theory of justice. Cambridge, Mass.: Belknap Press, 1971.
- Rossi, P.H., & Williams, W. (Eds.) Evaluating social programs. New York: Seminar Press, 1972.
- Scriven, M. The concept of evaluation. In M.W. Apple et al. (Eds.), Educational evaluation, analysis, and responsibility. Berkeley: McCutchan, 1974.
- Stake, R. The countenance of educational evaluation. Teachers College Record, 1967, 68(7), 523-540.
- Weiss, C.H. Evaluation research in the political context. In E.L. Struening & M. Guttentag (Eds.), Handbook of evaluation research. Beverly Hills, California: Sage Publications, 1975.
- Winch, R.F. & Campbell, D.T. Proof? no. evidence? yes. American Sociologist, 1969, 4(2), 140-143.
- Wolff, R.P. Understanding Rawls: a reconstruction and critique of "A Theory of Justice." Princeton: Princeton University Press, 1977.

Appendix

--Contingency table of public school administrators by sex and by position assignment in Oregon, Colorado, California, and Washington, 1973-1978

| | Superintendents and Assistant Superintendents | | | | | | | | Principals and Assistant Principals | | | | | | | |
|-----------|---|-------|--------|-------|-------|-------|--------|-------|-------------------------------------|-------|--------|-------|-------|-------|--------|-------|
| | Females | | | | Males | | | | Females | | | | Males | | | |
| | Or. | Colo. | Calif. | Wash. | Or. | Colo. | Calif. | Wash. | Or. | Colo. | Calif. | Wash. | Or. | Colo. | Calif. | Wash. |
| 1973-1974 | 4 | 3 | 31 | 2 | 311 | 244 | 1567 | 365 | 81 | 105 | 1426 | 60 | 1116 | 1154 | 7554 | 1743 |
| 1974-1975 | 6 | 5 | 36 | 2 | 317 | 250 | 1612 | 393 | 82 | 117 | 1216 | 86 | 1164 | 1196 | 7970 | 1773 |
| 1975-1976 | 4 | 1 | 42 | 3 | 324 | 264 | 1561 | 370 | 106 | 157 | 1283 | 94 | 1204 | 1287 | 7898 | 1753 |
| 1976-1977 | 5 | 1 | 48 | 4 | 326 | 265 | 1578 | 359 | 120 | 172 | 1634 | 127 | 1204 | 1300 | 7555 | 1752 |
| 1977-1978 | 3 | 2 | 44 | * | 326 | 261 | 1593 | * | 126 | 189 | 1830 | * | 1231 | 1299 | 7523 | * |

Supervisors, Directors, Coordinators and Assistant Supervisors,
Assistant Directors, Assistant Coordinators

| | Females | | | | Males | | | |
|-----------|---------|----------|------------|------------|--------|----------|------------|------------|
| | Oregon | Colorado | California | Washington | Oregon | Colorado | California | Washington |
| 1973-1974 | 160 | 165 | 551 | 29 | 474 | 410 | 2070 | 396 |
| 1974-1975 | 214 | 182 | 657 | 42 | 470 | 473 | 2238 | 419 |
| 1975-1976 | 183 | 209 | 671 | 54 | 455 | 515 | 2203 | 402 |
| 1976-1977 | 175 | 222 | 821 | 71 | 457 | 507 | 2292 | 361 |
| 1977-1978 | 196 | 192 | 927 | * | 477 | 483 | 2352 | * |

* Data not reported

SOURCE: Oregon Certificated Personnel in Public School Districts by sex and assignment, 1973-1978, Salem: Oregon State Department of Education; Salaries and Related Information: Certificated Personnel, 1973-1978, Denver: Colorado Department of Education; Salaries of Superintendents and Certain Other Administrative Officers in the Public Schools of California, 1973-1978, Sacramento: California State Department of Education; Certificated Staff by Position and Sex: State Summaries, 1972-1978, Olympia: Washington State Superintendent of Public Instruction, Management Information Service.